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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,065	07/16/2001	Masahide Hasegawa	35.G2864	5990

5514 7590 07/02/2002

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EXAMINER

SEVER, ANDREW T

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/905,065	Applicant(s) <i>H</i> HASEGAWA, MASAHIRO	
	Examiner Andrew T Sever	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 25 is/are rejected.
- 7) ☒ Claim(s) 19-24 and 26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 19-24 and 26 are objected to because of the following informalities: the words "one of" imply an either or relationship and in general makes the claim unclear, however an examination of the specification suggests that this rather should be written: "plurality of light emitters with a hollow section and a transparent section" so that its clear that light can pass through this section of the pointer to the screen. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1, 6, 7, 9, 14, 17, 18, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoneno (US 6317118).

Yoneno teaches in figure 1 an image display system for displaying an image on a screen (7) in response to a position of a pointer (3). The system includes a projection-type image display means (projector 4) a detector means (which is a detector unit as claimed by applicant in applicant's claim 25, specifically a camera 5) for detecting coordinates responsive to the position of the pointer (5). A signal from the pointer is

received by a receiver (11). Using the positional data and signal data from the pointer the computer 10 displays an image (such as an arrow or cursor) on the screen at a position that is predetermined based on the pointer's (5) position (as is claimed in applicant's claim 7), which is not necessarily immediately in front of the pointer. Since the receiver (11) and camera (5) are positioned below and above the edge of the screen respectively, it is inherent that the detection area of both is larger than a display image area as is claimed in applicant's claims 6 and 14.

With regards to claims 9 and 14 the existence of the image display system that does the above claimed activities, implies that a method exists to control it.

With regards to claims 17 and 18, a computer controls the image display system described above and it is inherent that the computer contains a storage medium (most likely a hard drive), which stores a computer program for controlling the display system to do the above claimed activities.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5, 8, 10-13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneno as applied to claims 1, 6, 7, 9, 14, 17, 18, and 25 above.

- a. Yoneno teaches as is described in more detail above, an image display system which includes a projector, a pointer, a screen, an detector means/unit for detecting signals from the pointer and determining its position (said unit consists of two components), and a display control means for controlling the display, which includes projecting a position indicator (such as an arrow or cursor) at a predetermined distance from the position coordinates detected by the detector means/unit.
- b. Yoneno further teaches in column 1 lines 5-12, that this system can be used for operating application software, however Yoneno neither specifically teaches a modifying means for modifying the predetermined distance that includes one or more switches, nor that a different combination of said switches determines the direction of the position indicator, nor that this modifying can be done by pointing to a modification display presented on the screen.
- c. One such well known operating application software that would commonly be uses in presentations with Yoneno's system is Microsoft's Power Point, which is usually run in Microsoft's Windows operating system. Those skilled in computers know that within the system menu of the Windows operating system one can modify the position indicator (the arrow or cursor). Some of the modifications that can be performed are a change in shape of the arrow, an enlargement or shrinkage of the arrow; it can be switched from a right oriented arrow to a left oriented arrow and other modifications. It would be obvious when applicable to also allow the user to modify the predetermined distance in this or a similar way as this would allow a small movement by the pointer to correspond to a large movement of the position indicator, which would be usefully when

because of the user's position, they are unable to directly project to certain parts of the screen. Further as is claimed in applicant's claim 8, 15, and 16, the movements could be dynamically exaggerated (the predetermined distance could be set in proportion to the distance of the position coordinates detected by the detector from an edge of the screen.) Such a system is well known and often used in such things as video games. Another example is in software such as Word, where clicking the mouse wheel causes the cursor to behave differently inside the text area then outside it; when movement of the pointer occurs vertically inside the text area, the cursor move little while the text scrolls, when the indicator is taken outside of the text area (which is generally closer to the edges) the indicator moves with a 1:1 relationship to the pointer, thus inside the text box the predetermined relationship is increased so that the indicator remains relatively stationary while the pointer is moved.

Yoneno teaches in column 5 lines 50-55 that the pointer and its switches/buttons can be assigned functions that a mouse would normally have, infrared keyboards were also well known in the art at the time the invention was made. The normal method for modifying the arrow in windows is by using the mouse and clicking its switches to make the change in the appropriate menu, this menu would be selected by the user pushing the switches (buttons) on the mouse. The projector would then display the modifying means and the user would click on the setting most desirable for that user and the user's audience (as is claimed in applicant's claim 5.) With Microsoft office applications such as Word and in Windows in general, it is possible to assign functions to pushing a plurality of switches (buttons) on the mouse (or keyboard) at one time, one such

configuration that would be useful during a presentation is the ability to change the shape, size, and characteristics of the pointer quickly such as changing the pointer into a highlighter. Thus it would be obvious to one with ordinary skill in the art that the user could pre-configure windows so that when a set plurality of switches on the pointer are simultaneously pressed the menu for changing the position indicator would immediately opened.

d. Given the ease of re-configuring windows to recognize certain combinations of switches on a pointer device and the usefulness of being able to change the nature of the position indicator displayed on the screen quickly, it would have been obvious to one of ordinary skill in the art to assign functions to a combination of switches on Yoneno's pointer so that the shape, size, orientation, and other characteristics of the position indicator could quickly be changed with minimal number of user inputs.

e. With regards to claims 10-16 the teaching of the above display system implies a method of controlling the image display system to do the claimed activities.

Allowable Subject Matter

6. Claims 19-24 and 26 are objected to as described above in paragraph, but would be allowable if rewritten in such a way that the objection could be removed as described in the same above paragraph.

7. The following is a statement of reasons for the indication of allowable subject matter: Although Yoneno teaches in figure 9 a pointer with a plurality of light emitters with one hollow section, that section is not transparent. Nowhere in the prior art was a pointer found that had this

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transparent section as is shown in applicant's figures 12 and 13. The transparent section is understood to be the ability to see through the pointer in order to see the screen behind it including position indicator 55. Since this was not found independent claims 19, 22, 23, 24, and 26 are considered allowed. Claims 20 and 21 are dependent on claim 19 and are therefore also allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,050,690 to Shaffer et al. Figure 9 teaches using pointers for controlling a windows type program; further Shaffer teaches that the pointers can perform the function of a mouse.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 703-305-4036. The examiner can normally be reached M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached at 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-308-7382 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

AS

June 26, 2002


RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800